weighing 200–250 g that had been fasted for 16 hr. At 0.5, 1, 2, 4 and 6 hours after administration, blood was taken and heparinized plasma was separated by conventional method. The concentration of the test compound in the plasma was determined by high performance liquid chromatography, the results of which are shown in Table 20.

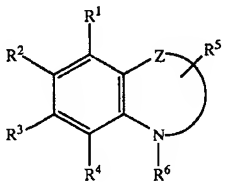
TABLE 20

Test compound	Highest concentration in plasma (μg/ml)
Example 4	13.6
Example 36	12.2

What is claimed is:

1. A heterocyclic compound of the formula (I)

(I)



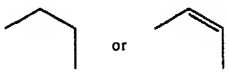
wherein

one of R^1, R^2 and R^5 is hydroxy, carboxy, alkoxycarbonyl, a group of the formula $—NR^9R^{10}$ wherein R^9 and R^{10} are each independently hydrogen atom or lower alkyl, or alkyl or alkenyl substituted by hydroxy, carboxy, sulfonic acid group or phosphoric acid group, alkoxycarbonyl or a group of the formula $—NR^9R^{10}$ wherein R^9 and R^{10} are each independently hydrogen atom or lower alkyl, and the other two are each independently hydrogen atom, lower alkyl or lower alkoxy;

either R^3 or R^4 is a group of the formula $—NHCOR^7$ wherein R^7 is alkyl, alkoxyalkyl, alkylthioalkyl, cycloalkyl, cycloalkylalkyl, aryl, arylalkyl or a group of the formula $—NHR^8$ wherein R^8 is alkyl, cycloalkyl, cycloalkylalkyl, aryl or arylalkyl, and the other is hydrogen atom, lower alkyl or lower alkoxy;

R^6 is alkyl, alkenyl, alkoxyalkyl, alkylthioalkyl, cycloalkyl, cycloalkylalkyl or arylalkyl; and

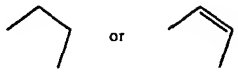
Z is



or a pharmaceutically acceptable salt thereof, provided that when one of R^1, R^2 and R^5 is carboxy or alkoxycarbonyl, Z should be a group of the formula

2. The heterocyclic compound of claim 1, wherein, in the formula (I), one of R^1, R^2 and R^5 is alkyl or alkenyl substituted by hydroxy, carboxy, sulfonic acid group or phosphoric acid group, alkoxycarbonyl or a group of the formula $—NR^9R^{10}$ wherein R^9 and R^{10} are each independently hydrogen atom or lower alkyl, and the other two are each independently hydrogen atom, lower alkyl or lower alkoxy, or a pharmaceutically acceptable salt thereof.

3. The heterocyclic compound of claim 2, wherein, in the formula (I), Z is



or a pharmaceutically acceptable salt thereof.

4. The heterocyclic compound of claim 3, wherein, in the formula (I), one of R^1, R^2 and R^5 is alkyl substituted by hydroxy, carboxy, alkoxycarbonyl or a group of the formula $—NR^9R^{10}$ wherein R^9 and R^{10} are each independently lower alkyl, and the other two are each independently hydrogen atom, lower alkyl or lower alkoxy, and either R^3 or R^4 is a group of the formula $—NHCOR^7$ wherein R^7 is alkyl, alkoxyalkyl, alkylthioalkyl, cycloalkyl, cycloalkylalkyl, aryl, arylalkyl or a group of the formula $—NHR^8$ wherein R^8 is alkyl, and the other is hydrogen atom, lower alkyl or lower alkoxy, or a pharmaceutically acceptable salt thereof.

5. The heterocyclic compound of claim 4, wherein, in the formula (I), R^1 and R^3 are each independently hydrogen atom, lower alkyl or lower alkoxy, either R^2 or R^5 is alkyl substituted by hydroxy, carboxy, alkoxycarbonyl or a group of the formula $—NR^9R^{10}$ wherein R^9 and R^{10} are each independently lower alkyl, and the other is hydrogen atom, lower alkyl or lower alkoxy, and R^4 is a group of the formula $—NHCOR^7$ wherein R^7 is alkyl, alkoxyalkyl, alkylthioalkyl, cycloalkyl, cycloalkylalkyl, aryl, arylalkyl or a group of the formula $—NHR^8$ wherein R^8 is alkyl, or a pharmaceutically acceptable salt thereof.

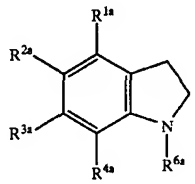
6. The heterocyclic compound of claim 5, wherein, in the formula (I), either R^2 or R^5 is alkyl substituted by hydroxy, carboxy, alkoxycarbonyl or a group of the formula $—NR^9R^{10}$ wherein R^9 and R^{10} are each independently lower alkyl, and the other is hydrogen atom, or a pharmaceutically acceptable salt thereof.

7. The heterocyclic compound of claim 6, wherein, in the formula (I), R^1 and R^3 are each independently hydrogen atom or lower alkyl, either R^2 or R^5 is alkyl substituted by hydroxy, carboxy, alkoxycarbonyl or a group of the formula $—NR^9R^{10}$ wherein R^9 and R^{10} are each independently lower alkyl, and the other is hydrogen atom, R^4 is a group of the formula $—NHCOR^7$ wherein R^7 is alkyl, cycloalkyl or cycloalkylalkyl, and R^6 is alkyl, cycloalkyl or cycloalkylalkyl, or a pharmaceutically acceptable salt thereof.

8. The heterocyclic compound of claim 7, wherein, in the formula (I), R^2 is alkyl substituted by hydroxy, carboxy, alkoxycarbonyl or a group of the formula $—NR^9R^{10}$ wherein R^9 and R^{10} are each independently lower alkyl, and R^5 is hydrogen atom, or a pharmaceutically acceptable salt thereof.

9. The heterocyclic compound of claim 8, which is represented by the formula (IIa)

(IIa)



wherein R^{1a} is hydrogen atom or lower alkyl, R^{3a} is lower alkyl, R^{2a} is alkyl substituted by hydroxy or carboxy, R^{4a} is

a group of the formula —NHCOR^{7a} wherein R^{7a} is alkyl, cycloalkyl or cycloalkylalkyl, and R^{6a} is alkyl, cycloalkyl or cycloalkylalkyl, or a pharmaceutically acceptable salt thereof.

10. The heterocyclic compound of claim **9**, wherein, in the formula (IIa), R^{1a} is hydrogen atom or lower alkyl, R^{3a} is lower alkyl, R^{2a} is alkyl substituted by hydroxy or carboxy, R^{4a} is a group of the formula —NHCOR^{7a} wherein R^{7a} is alkyl, and R^{6a} is alkyl, or a pharmaceutically acceptable salt thereof.

11. The heterocyclic compound of claim **10**, wherein the compound of the formula (IIa) is selected from the group consisting of:

(1) N-(1-hexyl-5-carboxythyl-4,6-dimethylindolin-7-yl)-2,2-dimethylpropanamide,

(2) N-(1-heptyl-5-carboxymethyl-4,6-dimethylindolin-7-yl)-2,2-dimethylpropanamide,

(3) N-(1-octyl-5-carboxymethyl-4,6-dimethylindolin-7-yl)-2,2-dimethylpropanamide,

(4) N-(1-nonyl-5 carboxymethyl-4,6-dimethylindolin-7-yl)-2,2-dimethylpropanamide,

(5) N-(1-decyl-5-carboxymethyl-4,6-dimethylindolin-7-yl)-2,2-dimethylpropanamide,

(6) N-(1-undecyl-5-carboxymethyl-4,6-dimethylindolin-7-yl)-2,2-dimethylpropanamide,

(7) N-(1-dodecyl-5-carboxymethyl-4,6-dimethylindolin-7-yl)-2,2-dimethylpropanamide,

(8) N-(1-hexyl-5-hydroxymethyl-6-methylindolin-7-yl)-2,2-dimethylpropanamide,

(9) N-(1-hexyl-5-hydroxymethyl-4,6-dimethylindolin-7-yl)-2,2-dimethylpropanamide,

(10) N-(1-heptyl-5-hydroxymethyl-6-mthylindolin-7-yl)-2,2-dimethylpropanamide,

(11) N-(1-heptyl-5-hydroxymethyl-4,6-dimethylindolin-7-yl)-2,2-dimethylpropanamide,

(12) N-(1-octyl-5-hydroxymethyl-6-methylindolin-7-yl)-2,2-dimethylpropanamide, and

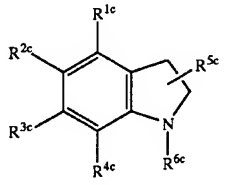
(13) N-(1-octyl-5-hydroxymethyl-4,6-dimethylindolin-7-yl)-2,2-dimethylpropanamide,

or a pharmaceutically acceptable salt thereof.

12. The heterocyclic compound of claim **1**, wherein, in the formula (I), one of R^1, R^2 and R^5 is hydroxy, carboxy, alkoxycarbonyl or a group of the formula —NR^{9}R^{10} wherein R^9 and R^{10} are each independently hydrogen atom or lower alkyl, and the other two are each independently hydrogen atom, lower alkyl or lower alkoxy, or a pharmaceutically acceptable salt thereof.

13. The heterocyclic compound of claim **12**, which is represented by the formula (IIc)

(IIc)



wherein one of R^{1c}, R^{2c} and R^{5c} is hydroxy, carboxy, alkoxycarbonyl or a group of the formula —NR^{9c}R^{10c} wherein R^{9c} and R^{10c} are each independently hydrogen atom or lower alkyl and the other two are each independently hydrogen atom, lower alkyl or lower alkoxy, either R^{3c} or R^{4c} is a group of the formula —NHCOR^{7c} wherein R^{7c} is alkyl, alkoxyalkyl, alkylthioalkyl, cycloalkyl, cycloalkylalkyl, aryl, arylalkyl or a group of the formula —NHR^{8c} wherein R^{8c} is alkyl, cycloalkyl, cycloalkylalkyl, aryl or arylalkyl and the other is hydrogen atom, lower alkyl or lower alkoxy, and R^{6c} is alkyl, alkenyl, alkoxyalkyl, alkylthioalkyl, cycloalkyl, cycloalkylalkyl or arylalkyl, or a pharmaceutically acceptable salt thereof.

14. The heterocyclic compound of claim **13**, wherein, in the formula (IIc), R^{1c} and R^{3c} are each independently hydrogen atom, lower alkyl or lower alkoxy, R^{2c} is carboxy, R^{4c} is a group of the formula —NHCOR^{7c} wherein R^{7c} is alkyl, cycloalkyl or cycloalkylalkyl, R^{5c} is hydrogen atom, and R^{6c} is alkyl, cycloalkyl or cycloalkylalkyl, or a pharmaceutically acceptable salt thereof.

15. The heterocyclic compound of claim **14**, wherein, in the formula (IIc), R^{1c} is hydrogen atom or lower alkyl, R^{3c} is lower alkyl, R^{2c} is carboxyl, R^{4c} is a group of the formula —NHCOR^{7c} wherein R^{7c} is alkyl, R^{5c} is hydrogen atom, and R^{6c} is alkyl, or a pharmaceutically acceptable salt thereof.

16. The heterocyclic compound of claim **15**, wherein the compound of the formula (IIc) is selected from the group consisting of:

(1) N-(1-hexyl-5-carboxy-6-methylindolin-7-yl)-2,2-dimethylpropanamide,

(2) N-(1-octyl-5-carboxy-6-methylindolin-7-yl)-2,2-dimethylpropanamide,

(3) N-(1-decyl-5carboxy-6-methylindolin-7-yl)-2,2-dimethylpropanamide,

(4) N-(1-hexyl-5-carboxy-4,6-dimethylindolin-7-yl)-2,2-dimethylpropanamide,

(5) N-(1-octyl-5-carboxy-4,6-dimethylindolin-7-yl)-2,2-dimethylpropanamide, and

(6) N-(1-decyl-5-carboxy-4,6-dimethylindolin-7-yl)-2,2-dimethylpropanamide,

or a pharmaceutically acceptable salt thereof.

17. A pharmaceutical composition comprising an effective amount of a heterocyclic compound of claim **1** or a pharmaceutically acceptable salt thereof.

18. A method of inhibiting acyl-CoA:cholesterol acyltransferase in a patient in need of same which comprises administering to such patient the composition of claim **17**.

19. A method of inhibiting lipoperoxidation in a patient in need of same which comprises administering to such patient the composition of claim **17**.

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